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PATENT APPLICATION

ATTORNEY DOCKET NO. TRMB-1412

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IN THE  
UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor(s): Dennis YORK

Confirmation No.: 9289

Application No.: 10/651,586

Examiner: Peyton, Tammara R.

Filing Date: August 29, 2003

Group Art Unit: 2182

Title: PORTABLE ELECTRONIC INSTRUMENT WITH FIELD-REPLACEABLE BATTERY/ INPUT/ OUTPUT MODULE

Mail Stop Appeal Brief-Patents  
Commissioner For Patents  
PO Box 1450  
Alexandria, VA 22313-1450

TRANSMITTAL OF APPEAL BRIEF

Transmitted herewith is the Appeal Brief in this application with respect to the Notice of Appeal filed on 04/23/2007.

The fee for filing this Appeal Brief is (37 CFR 1.17(c)) \$500.00.

(complete (a) or (b) as applicable)

The proceedings herein are for a patent application and the provisions of 37 CFR 1.136(a) apply.

(a) Applicant petitions for an extension of time under 37 CFR 1.136 (fees: 37 CFR 1.17(a)-(d)) for the total number of months checked below:

1st Month  
\$120

2nd Month  
\$450

3rd Month  
\$1020

4th Month  
\$1590

The extension fee has already been filed in this application.

(b) Applicant believes that no extension of time is required. However, this conditional petition is being made to provide for the possibility that applicant has inadvertently overlooked the need for a petition and fee for extension of time.

Please find enclosed a check in the sum of \$500. At any time during the pendency of this application, please charge any fees required or credit any over payment to Deposit Account 50-4157 pursuant to 37 CFR 1.25. Additionally please charge any fees to Deposit Account 50-4157 under 37 CFR 1.16 through 1.21 inclusive, and any other sections in Title 37 of the Code of Federal Regulations that may regulate fees. A duplicate copy of this sheet is enclosed.

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to:  
Commissioner for Patents, Alexandria, VA 22313-1450

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I hereby certify that this paper is being transmitted to the Patent and Trademark Office facsimile number (571)273-8300.

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Respectfully submitted,  
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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Appellant: York, Dennis                      Patent Application  
Serial No.: 10/651,586                      Group Art Unit: 2182  
Filed: August 29, 2003                      Examiner: Peyton, T.

For: Portable Electronic Instrument With Field-Replaceable Battery/Input/Output Module

APPEAL BRIEF

07/31/2007 RFEKADU1 00000020-09947489  
01 FC:1402                      500.00-0P

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07/31/2007 RFEKADU1 00000017 10651586  
01 FC:1402

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Real Party in Interest

The assignee of the present invention is Trimble Navigation limited.

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Related Appeals and Interferences

There are no related appeals or interferences known to the Appellant.

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Status of Claims

Claims 1-30 stand rejected. Rejections of Claims 1-30 are herein appealed.

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Status of Amendments

All proposed amendments have been entered. An amendment subsequent to the Final Action has not been filed.

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Summary of Claimed Subject Matter

In accordance with Independent Claim 1, one embodiment of the claimed invention pertains to processing unit for an electronic instrument (105 of Figure 1 and page 8 lines 5-12). The unit comprises a signal/data processor (page 8 lines 5-8). The unit 105 also includes an exposed external electrical contact for receiving electric power input (225 of Figure 2 and page 10 lines 8-14). The unit 105 additionally includes an exposed external electrical contact for receiving an electric signal input (225 of Figure 2 and page 10 lines 8-14). Unit 105 also includes an exposed external electrical contact for transmitting an electrical signal output (225 of Figure 2 and page 10 lines 8-14). The processing unit also includes a housing comprising mechanical retention features for securely attaching a battery/input/output module (110 of Figure 2 and page 10 lines 15-22).

In accordance with Independent Claim 8, one embodiment of the claimed invention pertains to a battery/input/output module for a portable electronic instrument (110 of Figure 2 and page 10 lines 15-22). The module comprises a storage device for electric energy (page 11 lines 1-10). The module also comprises an exposed external electrical contact for transmitting electric power (255 of Figure 2 and page 10 lines 16-18). In addition, the module comprises an exposed external electrical contact for receiving an electric signal input (245, 250 of Figure 2 and page 10 lines 15-20). The module further comprises an exposed external electrical contact for transmitting an electrical signal output (245, 250 of Figure 2 and page 10 lines 15-20). The module also

comprises a housing comprising mechanical retention features for securely attaching a processing unit (Figure 3 and page 11 lines 19-24).

In accordance with Independent Claim 15, one embodiment of the claimed invention pertains to a portable electronic instrument (105 and 110 of Figure 1 and page 8 lines 5-12). The unit comprises a portable processing unit (105 of Figure 1 and page 8 lines 5-12) comprising a signal/data processor (page 8 lines 5-8); an exposed external electrical contact for receiving electric power input (225 of Figure 2 and page 10 lines 8-14); an exposed external electrical contact for receiving an electric signal input (225 of Figure 2 and page 10 lines 8-14); an exposed external electrical contact for transmitting an electrical signal output (225 of Figure 2 and page 10 lines 8-14); and a housing comprising mechanical retention features for securely attaching a battery/input/output module (110 of Figure 2 and page 10 lines 15-22). The portable electronic instrument further comprises a portable battery/input/output module (110 of Figure 2 and page 10 lines 15-22)coupled with the portable processing unit. The module comprises a storage device for electric energy (page 11 lines 1-10); an exposed external electrical contact for transmitting electric power (255 of Figure 2 and page 10 lines 16-18); an exposed external electrical contact for receiving an electric signal input (245, 250 of Figure 2 and page 10 lines 15-20); an exposed external electrical contact for transmitting an electrical signal output (245, 250 of Figure 2 and page 10 lines 15-20); and a housing comprising mechanical retention features for securely attaching a processing unit (Figure 3 and page 11 lines 19-24).

Grounds of Rejection to be Reviewed on Appeal

1. Claims 1-19 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Dickie (6,798,647).
2. Claim 20 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Dickie (6,798,647) and Kamijo et al., (6,538,880) or Ross (5,859,628).

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## Arguments

### 1. Whether Claims 1-19 are unpatentable over 35 U.S.C. §103(a) by Dickie.

#### KEY CLAIM LIMITATIONS THAT ARE NOT MET BY THE CITED REFERENCES

Claims 1 and 15 set forth a processing unit for an electronic instrument comprising:

- a signal/data processor;
- an exposed external electrical contact for receiving electric power input;
- an exposed external electrical contact for receiving an electric signal input;
- an exposed external electrical contact for transmitting an electrical signal output;

and

a housing comprising mechanical retention features for securely attaching a battery/input/output module.

In the final Office Action dated 1/24/07, the Examiner has referenced Figure 4 of Dickie as containing subject matter that teaches the aforementioned features of Claims 1 and 15. The Appellant respectfully disagrees with the Examiner. That is, the Appellant does not understand Dickie to teach or render obvious the features of Claims 1 and 15.

In the Office Action, the Examiner states “a housing (102) comprising mechanical retention features for securely attaching a battery/input/output module. (see figure 4, housing of PDA 102 securely attaches to battery/input/output module 104, col. 3, lines 62-col. 4, lines 1-47).”

**To establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. In re Royka, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). (MPEP 2143.03).**

Appellant does not understand the components 102 and 104 of Dickie to teach or render obvious the features of Claims 1 and 15. Specifically, Appellant understands Dickie to teach that the PDA 102 can be docked into the docking cradle 120. The portable computer 104 physically stores and protects the PDA 102 when docked so that the user can easily carry both the portable computer 104 and PDA 102 (emphasis added).

Thus, Appellant respectfully submits that 104 is not a battery/input/output module as stated by the Examiner but is instead a portable computer 104. Moreover, Claims 1 and 15 clearly state "a housing comprising mechanical retention features for securely attaching a battery/input/output module" (emphasis added). Thus, it is the housing that retains the battery/input/output module in Claims 1 and 15.

In contrast, Appellant respectfully states that Dickie teaches that it is the portable computer 104 that physically stores and protects the PDA 102 when docked (emphasis added). For this reason, Appellant respectfully states that Dickie does not teach or render obvious the features of Claims 1 and 15. As such, the rejection under 35 U.S.C. §103(a) is improper as an essential element needed for a proper *prima facie* rejections is missing.

In addition, Appellant does not understand the components 102 and 104 of Dickie to teach or render obvious the features of Claims 1 and 15. Specifically, Appellant further understands Dickie to teach (at column 3 lines 10-21), the integrated PDA docking cradle 120 offers the cradle functionality to interface the PDA 102 with the portable computer 104, thereby eliminating the need for external docking cradles. When docked, the PDA 102 is able to communicate with the portable computer 104, via either direct electrical coupling or other means (e.g., proximity coupling, JR coupling, RF coupling, etc.). The PDA 102 and portable computer 104 can exchange data to synchronize various information, such as appointments, email, contacts, and so on. Additionally, power may be supplied to charge a battery resident at the PDA 102 (emphasis added).

Thus, Appellant respectfully submits that PDA 102 of Dickie is already taught as having its own battery and that the portable computer 104 of Dickie is not a battery/input/output module as stated by the Examiner but is instead a dock as taught by Dickie.

For this reason, Appellant respectfully states that Dickie does not teach or render obvious the features of Claims 1 and 15. As such, the rejection under 35 U.S.C. §103(a) is improper as an essential element needed for a proper *prima facie* rejections is missing.

In addition, Appellant respectfully submits that page 11 of the specification clearly defines the battery/input/output module including in the description of Figures 2 and 3 wherein the battery/input/output module is described as “The battery/input/output module 110 houses a rechargeable energy storage device that is coupled to at least one of the contacts 125. The rechargeable energy storage device may be a battery or a capacitor. The energy storage device may be recharged by connecting an external power source to the power port 255. Alternatively, the energy storage device may be charged by inductively coupling to a recharging circuit sealed within the module 110. In either case, the assembled instrument may be configured to be operated while recharging the energy storage device.

The module 110 may also house a wireless communications device (e.g. Bluetooth) that is coupled to at least one of the contacts 125. Although a wireless device may be embedded within the processing unit 105, embedding within the module 110 reduces the size of the processing unit 110 and maintains flexibility in input/output capability. FIG. 3 shows an end view of the processing unit 105 and the battery/input/output module 110. The ports 245, 250, and 255 are recessed to protect against impact. The housing of the module 110 may be molded from a resilient material, allowing the module to provide mechanical shock resistance to the embedded components. The module 110 may also be shaped to wrap around the processing unit 105 to provide shock resistance for the processing unit 105.” (emphasis added).

Thus, Appellant respectfully submits the “battery/input/output module” words of the claim must be given their plain meaning. In other words, they must be read as they would be interpreted by those of ordinary skill in the art. *In re Sneed*, 710 F.2d 1544, 218 USPQ 385 (Fed. Cir. 1983). Moreover, as provided herein, the battery/input/output module terminology is clearly defined in the Specification and the Figures.

Therefore, Appellant respectfully submits that the portable computer of Dickie (including a processor 410, one or more storages 412 (e.g., RAM, ROM, hard disk, floppy disk, CD-ROM, DVD, etc.), an interface 414, the display 110, the keyboard 114, the mouse pad 116, and the status LCD 124) is clearly not a battery/input/output module as defined in the present Specification.

Thus, Appellant respectfully submits that the Examiner’s statement that the battery/input/output module is taught or rendered obvious by a portable computer is incorrect and therefore the rejection of Claim 1 and 15 is incorrect and should be withdrawn.

Regarding Claims 2-7 and 16-19, Appellant respectfully submits that Claims 2-7 and 16-19 are also allowable as pending from allowable base Claims and reciting further features of the Claimed invention.

With respect to Independent Claim 8, Appellant respectfully states that Claim 8 includes the features “A portable battery/input/output module for a portable electronic instrument comprising:

- a storage device for electric energy;
- an exposed external electrical contact for transmitting electric power;
- an exposed external electrical contact for receiving an electric signal input;
- an exposed external electrical contact for transmitting an electrical signal output;

a housing comprising mechanical retention features for securely attaching a processing unit.”

As previously stated herein, Appellant understands the Examiner to state that Dickie teaches the claimed feature of a battery/input/output module with element 104, a portable computer 104 (e.g., laptop, notebook, etc.). Appellant respectfully disagrees that a portable computer 104 (e.g., laptop, notebook, etc.) is the same as a battery/input/output module.

For at least the same reasons provided above, e.g., the portable computer 104 physically stores and protects the PDA 102 when docked and that PDA 102 of Dickie is already taught as having its own battery and that the portable computer 104 of Dickie is not a battery/input/output module as stated by the Examiner but is instead a dock as taught by Dickie (emphasis added). Appellant respectfully submits that Dickie does not teach or render obvious the features of “A portable battery/input/output module for a portable electronic instrument comprising: a storage device for electric energy; an exposed external electrical contact for transmitting electric power; an exposed external electrical contact for receiving an electric signal input; an exposed external electrical contact for transmitting an electrical signal output; a housing comprising mechanical retention features for securely attaching a processing unit as provided in Claim 8. As such, the rejection under 35 U.S.C. §103(a) is improper as an essential element needed for a proper *prima facie* rejections is missing.

In addition, Appellant understands the Examiner to state that Dickie teaches the claimed feature of a battery/input/output module with element 104, a portable computer 104 (e.g., laptop, notebook, etc.). Appellant respectfully disagrees that a portable computer 104 (e.g., laptop, notebook, etc.) is the same as a battery/input/output module. Specifically, the battery/input/output module of the present claimed feature are clearly described in the Specification.

Appellant respectfully submits that page 11 of the specification clearly defines the battery/input/output module including in the description of Figures 2 and 3 wherein the battery/input/output module is described as “The battery/input/output module 110 houses a rechargeable energy storage device that is coupled to at least one of the contacts 125. The rechargeable energy storage device may be a battery or a capacitor. The energy storage device may be recharged by connecting an external power source to the power port 255. Alternatively, the energy storage device may be charged by inductively coupling to a recharging circuit sealed within the module 110. In either case, the assembled instrument may be configured to be operated while recharging the energy storage device.”

The module 110 may also house a wireless communications device (e.g. Bluetooth) that is coupled to at least one of the contacts 125. Although a wireless device may be embedded within the processing unit 105, embedding within the module 110 reduces the size of the processing unit 110 and maintains flexibility in input/output capability. FIG. 3 shows an end view of the processing unit 105 and the battery/input/output module 110. The ports 245, 250, and 255 are recessed to protect against impact. The housing of the module 110 may be molded from a resilient material, allowing the module to provide mechanical shock resistance to the embedded components. The module 110 may also be shaped to wrap around the processing unit 105 to provide shock resistance for the processing unit 105.” (emphasis added).

Thus, Appellant respectfully submits the “battery/input/output module” words of the claim must be given their plain meaning. In other words, they must be read as they would be interpreted by those of ordinary skill in the art. *In re Sneed*, 710 F.2d 1544, 218 USPQ 385 (Fed. Cir. 1983). Moreover, as provided herein, the battery/input/output module terminology is clearly defined in the Specification and the Figures.

Therefore, Appellant respectfully submits that the portable computer of Dickie (including a processor 410, one or more storages 412 (e.g., RAM, ROM, hard disk, floppy disk, CD-ROM, DVD, etc.), an interface 414, the display 110, the keyboard 114,

the mouse pad 116, and the status LCD 124) is clearly not a battery/input/output module as defined in the present Specification. Therefore, Appellant respectfully submits that the Examiner's statement that the battery/input/output module is taught or rendered obvious by a portable computer is incorrect and therefore the rejection of Claim 8 is incorrect and should be withdrawn.

Regarding Claims 9-14, Appellant respectfully submits that Claims 9-14 are also allowable as pending from an allowable base Claim and reciting further features of the Claimed invention.

Regarding Claims 10-12, Appellant did not find any reasons cited by the Examiner for the rejection of Claims 10-12. For this reason, Appellant submits that the undisclosed rejection of Claims 10-12 is improper and that Claims 10-12 are allowable.

2. Whether Claim 20 is unpatentable over 35 U.S.C. §103(a) by Dickie and Kamijo et al. or Ross.

Regarding Claim 20, Appellant respectfully submits that Claim 20 is dependent from an allowable Independent Claim 15. Therefore, Claim 20, which depends from an allowable Independent Claim 15, is also in condition for allowance as being dependent on an allowable base Claim and reciting further features of the present claimed invention.

Conclusion

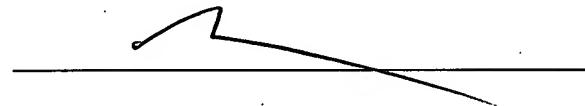
In summary, the Appellants respectfully request that the Board reverse the Examiner's rejections of claims 1-20.

The Appellants wish to encourage the Examiner or a member of the Board of Patent Appeals to telephone the Appellants' undersigned representative if it is felt that a telephone conference could expedite prosecution.

Respectfully submitted,

WAGNER BLECHER LLP

Date: 07/25/07

  
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## Claims Appendix

1. (original) A processing unit for an electronic instrument comprising:
  - a signal/data processor;
  - an exposed external electrical contact for receiving electric power input;
  - an exposed external electrical contact for receiving an electric signal input;
  - an exposed external electrical contact for transmitting an electrical signal output;and
  - a housing comprising mechanical retention features for securely attaching a battery/input/output module.
2. (original) The processing unit of claim 1, wherein said processing unit comprises a memory.
3. (original) The processing unit of claim 1, wherein said processing unit comprises a keypad.
4. (original) The processing unit of claim 1, wherein said processing unit comprises a microprocessor.
5. (original) The processing unit of claim 1, wherein the contacts may be sealed through the attachment of a cover to the surface of said housing.
6. (original) The processing unit of claim 1, wherein said processing unit comprises a display.
7. (original) The processing unit of claim 6, wherein said display is a touch panel display.

8. (previously presented) A portable battery/input/output module for a portable electronic instrument comprising:

- a storage device for electric energy;
- an exposed external electrical contact for transmitting electric power;
- an exposed external electrical contact for receiving an electric signal input;
- an exposed external electrical contact for transmitting an electrical signal output;
- a housing comprising mechanical retention features for securely attaching a processing unit.

9. (original) The battery/input/output module of claim 8, wherein the contacts may be sealed through the attachment of a cover to the surface of said housing.

10. (original) The battery/input/output module of claim 8, further comprising a serial port electrically coupled to said exposed electrical contact for transmitting an electrical signal output.

11. (original) The battery/input/output module of claim 8, further comprising a parallel port electrically coupled to said exposed electrical contact for transmitting an electrical signal output.

12. (original) The battery/input/output module of claim 8., further comprising a wireless transceiver for data communications electrically coupled to said exposed electrical contact for transmitting an electrical signal output.

13. (original) The battery/input/output module of claim 8, further comprising an embedded inductive charger for said energy storage device.

14. (original) The battery/input/output module of claim 8, further comprising a power input port for charging said energy storage device.

15. (previously presented) A portable electronic instrument comprising:
- a portable processing unit comprising:
    - a signal/data processor;
    - an exposed external electrical contact for receiving electric power input;
    - an exposed external electrical contact for receiving an electric signal input;
    - an exposed external electrical contact for transmitting an electrical signal output; and
  - a housing comprising mechanical retention features for securely attaching a battery/input/output module; and
  - a portable battery/input/output module coupled with said portable processing unit, said battery/input/output module comprising:
    - a storage device for electric energy;
    - an exposed external electrical contact for transmitting electric power;
    - an exposed external electrical contact for receiving an electric signal input;
    - an exposed external electrical contact for transmitting an electrical signal output; and
  - a housing comprising mechanical retention features for securely attaching a processing unit.

16. (original) The portable electronic instrument of claim 15, wherein said portable electronic instrument is sealed.

17. (original) The portable electronic instrument of claim 15, wherein said portable electronic instrument may be powered by coupling an external power source to said battery/input/output module.

18. (original) The portable electronic instrument of claim 17, wherein said external power source may be inductively coupled to said battery/input/output module.

19. (original) The portable electronic instrument of claim 15, wherein said portable electronic instrument is a handheld computer.

20. (original) The portable electronic instrument of claim 15, wherein said portable electronic instrument comprises a global positioning system (GPS).

Evidence Appendix

None

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Related Proceedings Appendix

None

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